

ABSTRACT OF THE DISCLOSURE

The present invention relates to a wavelength multiplexing apparatus for multiplexing and/or demultiplexing a plurality of optical signals in the wavelength region and a signal conversion apparatus for interfacing a transmission line corresponding to any of the optical signals with the wavelength multiplexing apparatus. By using these apparatus according to the invention, the signal to be a reference for synchronization between the wavelength multiplexing apparatus and the signal conversion apparatus is reliably delivered via an existing optical transmission line therebetween, without the reduction of transmission quality and the limitation on modulation systems. Therefore, in an optical transmission system with the present invention applied thereto, it is possible to meet conditions for office establishment and arrangement of the apparatus and satisfy the demands for maintenance/operation flexibly and at a low cost. Further, service quality and reliability are maintained at high levels.